CAROUSEL DEVICE FOR STORING GUNS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application Number 60/433,154, filed on December 13, 2002.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

BACKGROUND OF THE INVENTION

[0003] The present invention relates to a device for storing guns. In particular, the present invention relates to a carousel device with a plurality of barrel receiving portions for storing guns in an upright position.

[0004] Conventional gun stands are typically mounted adjacent to a wall or on the inside wall of a safe, and hold a nominal number of guns. Presently, if one wishes to store a large number of guns, a proportionately large amount of space must be devoted to a suitable gun stand. In addition to the space occupied by the gun stand itself, a significant area surrounding the gun stand must be kept clear so that the owner can have unobstructed access to the guns.

[0005] Additionally, conventional gun stands are tee-pee style, wherein the upper portion, or barrel of the gun leans away from the owner, towards the center of the rack. This configuration requires excessive reaching and makes it difficult to remove a gun from the rack. None of the existing devices are adaptable for storing guns with the barrels extending in an upright position for ready manual engagement.

[0006] Accordingly, there exists a need for a gun storage device that ameliorates the aforementioned drawbacks and deficiencies. The present invention fills these needs as well as other needs.

BRIEF SUMMARY OF THE INVENTION

[0007] In order to overcome the above stated problems and limitations there is provided a carousel device for storing at least one gun in a generally upright position.

[0008] The device generally includes a base and a upper support section with a generally upright pole member positioned therebetween. The base has an upper surface with at least one recess formed therein where the recess includes an outer contact portion for contacting a butt of the gun. The upper support section has a receiving portion defined in the outer circumference thereof for receiving a barrel of the gun. The upright member has a longitudinal axis and is positioned between the base and the upper support member. The distance between the outer contact portion and the longitudinal axis is less than the distance between the receiving portion and the longitudinal axis, which allows the gun to be stored in a generally upright position and increase the accessibility of the guns. In addition, the base and the upper support section may be circular and rotate relative to a support surface. Further, the radius of the base may be smaller than the radius of the upper support section to reduce the amount of floor space taken up by the device.

[0009] Additionally, the device may include one or more storage cells to allow of the storage of additional items such as, but not limited to, permits, binoculars, barrels, or pistols. The storage cell may be positioned on a top surface of the upper support section and include features such as drawers and bungee cord devices. The present invention

may also include one or more fastening straps that operate retain the barrel of the gun within a barrel receiving portion of the upper support section.

[0010] Additional objects, advantages and novel features of the present invention will be set forth in part in the description which follows, and will in part become apparent to those in the practice of the invention, when considered with the attached figures.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0011] The accompanying drawings form a part of this specification and are to be read in conjunction therewith, wherein like reference numerals are employed to indicate like parts in the various views, and wherein:

[0012] FIG. 1 is a front perspective view of a carousel device according to the present invention located within a safe with the safe door being removed;

[0013] FIG. 2 is an enlarged view of a barrel receiving section of the device shown in FIG. 1; and

[0014] FIG. 3 is a perspective view showing the barrel receiving portion shown in FIG. 2 having a storage cell positioned thereon.

DETAILED DESCRIPTION OF THE INVENTION

[0015] Referring to the drawings and particularly FIG. 1, there is shown a carousel gun storage device 10 in accordance with the present invention. In general, carousel gun storage device 10 may include a base 9, a support pole 8, and an upper support section 11. Device 10 may rotate relative to a support surface about a longitudinal axis 26 and allows one or more guns 14 to be stored in a generally upright position. It will be understood that device 10 may be positioned within a safe or other type of enclosure as best seen in FIG. 1.

[0016] As best seen in FIG. 1, base 9 generally rests on a support surface and is adapted to provide support for a butt portion 27 of gun 14. Base 9 may include at least one recess 24 defined in a top surface thereof to prevent butt 27 from sliding relative to base 9. In particular, an outer contact portion 25 of at least one recess 24 is adapted to engage or otherwise come into contact with at least a portion of the outer surface of butt 27 to reduce the sliding on base 9. In the case where base 9 does not include one or more recesses 24, it will be understood that outer contact portion 25 is the outermost point relative to the longitudinal axis of pole 8 in which butt 27 is in contact with the top surface of base 9.

[0017] Base 9 may rotate relative to the support surface about longitudinal axis 26, which mat be the same as the longitudinal axis of support pole 8. Pole 8 may extend in a generally vertical direction and is positioned between base 8 and upper support section 11. Furthermore, an additional embodiment is contemplated wherein support pole 8 has an inner cavity suitable for storing additional guns while still allowing for the storage of guns in an upright position.

[0018] As best seen in FIG. 2, upper support section 11 may have one or more barrel receiving portions 12 adapted to receive the barrels 13 of one or more guns 14. Barrel receiving portions 12 may be defined in the periphery and are positioned about the circumference of upper support section 11. The shape of the receiving portions 12 in upper support section 11 may accommodate various barrel styles such as, but not limited to, double barrel, side-by-side, and under and over.

[0019] In order to keep the gun in a substantially upright position and maintain a relatively small base or footprint for maximizing available floor space, the distance (D_1)

between the outer contact portion 25 of at least one recess 24 and a common longitudinal axis 26 is less than the distance (D_2) between the at least one recess 12 and common longitudinal axis 26. As stated above, the common longitudinal axis 26 may be the longitudinal axis of pole 8. The orientation of the barrel receiving portion 12 relative to outer contact portion 25 of base 9 is relevant due to the non-axial alignment of the barrel and butt of a gun as best seen in FIG. 1. With this arrangement, the radius of the base 9 may be less than the radius of upper support section 11 thereby allowing for easier removal of guns and requiring less floor space. Guns with barrels mounted in an upright position are easier to retrieve than guns with barrels tilted toward the center of the rack. Furthermore, while base 8 and upper support section 11 are shown in the drawings as being circular, it will be understood that these components may also be formed in other shapes.

[0020] With further reference to FIG. 2, one or more straps 21 may be used to retain the guns 14 within barrel receiving portions 12 formed in carousel gun storage device 10. As stated above, barrel receiving portions 12 are defined in an outer surface 5 of the barrel receiving section 11. Straps 21 may have a fixed end 6 and a fastening end 7, wherein fixed end 6 is fixedly attached to the outer surface 5 on one side of receiving portion 12. In order to secure a gun in the rack, strap 21 extends across receiving portion 12 and is removably attached to the opposing side of the outer surface 5 by fastening end 7. It will be understood that straps 21 may have a hook and loop type fasteners (i.e., VELCRO) for easy attachment and removal, however other types of fasteners are also within the scope of the present invention. If hook and loop type fasteners are used, the straps will have hook type fasteners on one side of the strap and loop type fasteners on

the opposite side of the strap thereby allowing for fastening end 7 of a first strap to be fastened to the outer side of fixed end 6 of a second strap used for an adjacent receiving portion 12.

[0021] As best seen in FIG. 1, upper support section 11 of the carousel gun storage device 10 has an upper surface 15 that may be used to support a storage cell 16. Storage cell 16 may be used to store peripheral items such as, but not limited to, permits, binoculars, barrels, or pistols. Storage cell 16 may consist of one or more drawers 17 as well as a bungee cord network for securing articles to the outside surface of storage cell 16. As best seen in FIG. 3, the bungee cord network is comprised of a length of bungee cord 18 attached to an outer surface 20 of storage cell 16 by a plurality of knobs 19. The elastic property of the bungee cord allows for the secure storage of items between bungee cord 18 and outer surface 20 of storage cell 16.

[0022] The carousel gun storage device 10 of the present invention may serve as a stand alone device, or be positioned within the interior of a safe, as illustrated in FIG. 1. By positioning the rack 10 within the safe, the owner can easily access the desired gun by rotating the rack. Once the desired gun is positioned before the owner, one may unfasten the strap to free the barrel from the barrel receiving portion and remove the gun.

[0023] The present invention overcomes or ameliorates the drawbacks and deficiencies in the prior art. Specifically, the present invention allows for guns to be stored in an upright position by making the distance between the outer contact portion 25 of at least one recess 24 and a common longitudinal axis less than the distance between the at least one recess 12 and the longitudinal axis. With this arrangement, the radius of the base portion may be smaller than the radius of the upper support section thereby

allowing for easier removal of guns, while requiring less floor space. Furthermore, when the carousel gun rack is positioned in a safe, rotating the gun carousel grants the user easy access to the desired gun, eliminating the need for bending or reaching deeply into the safe.

[0024] While particular embodiments of the invention have been shown, it will be understood, of course, that the invention is not limited thereto, since modifications may be made by those skilled in the art, particularly in light of the foregoing teachings. Reasonable variation and modification are possible within the scope of the foregoing disclosure of the invention without departing from the spirit of the invention.